

Claims

1. A method for quantitatively determining cholesterol in high-density lipoprotein in a sample, which comprises:

reacting a sample with i) cholesterol esterase and cholesterol oxidase or ii) cholesterol esterase, an oxidized coenzyme and cholesterol dehydrogenase in an aqueous medium comprising a nonionic surfactant, polyanion and albumin, and measuring the formed hydrogen peroxide or a reduced coenzyme.

2. The method according to claim 1, wherein the aqueous medium further comprises a bile acid derivative.

3. The method according to claim 2, wherein the bile acid derivative is an anionic bile acid derivative.

4. The method according to any one of claims 1 to 3, wherein the nonionic surfactant is polyoxyethylene alkylamine or polyoxyethylene alkenylamine.

5. The method according to any one of claims 1 to 4, wherein the polyanion is dextran sulfate or a salt thereof.

6. A reagent for quantitatively determining cholesterol in high-density lipoprotein, which comprises a nonionic surfactant, polyanion, albumin, cholesterol esterase, cholesterol oxidase and a reagent for quantitatively determining hydrogen peroxide.

7. A reagent for quantitatively determining cholesterol

in high-density lipoprotein, which comprises a nonionic surfactant, polyanion, albumin, cholesterol esterase, cholesterol dehydrogenase and an oxidized coenzyme.

8. The reagent according to claim 7, further comprising a reagent for quantitatively determining a reduced coenzyme.

9. The reagent according to any of claims 6 to 8, which further comprises a bile acid derivative.

10. The reagent according to claim 9, wherein the bile acid derivative is an anionic bile acid derivative.

11. The reagent according to any one of claims 6 to 10, wherein the nonionic surfactant is polyoxyethylene alkylamine or polyoxyethylene alkenylamine.

12. The reagent according to any one of claims 6 to 11, wherein the polyanion is dextran sulfate or a salt thereof.

13. A kit for quantitatively determining cholesterol in high-density lipoprotein, which comprises a first reagent and a second reagent, wherein cholesterol esterase, polyanion, a nonionic surfactant, albumin and a reagent for quantitatively determining hydrogen peroxide are comprised in either or both of the first reagent and/or the second reagent, and cholesterol oxidase is comprised in the second reagent.

14. A kit for quantitatively determining cholesterol in high-density lipoprotein, which comprises a first reagent comprising polyanion and a second reagent comprising cholesterol oxidase wherein cholesterol esterase, a nonionic surfactant,

albumin and a reagent for quantitatively determining hydrogen peroxide are comprised in either or both of the first reagent and/or the second reagent.

15. A kit for quantitatively determining cholesterol in high-density lipoprotein, which comprises a first reagent and a second reagent, wherein polyanion, a nonionic surfactant, albumin and an oxidized coenzyme are comprised in either or both of the first reagent and/or the second reagent, and cholesterol dehydrogenase is comprised in the second reagent.

16. A kit for quantitatively determining cholesterol in high-density lipoprotein, which comprises a first reagent comprising polyanion and a second reagent comprising a cholesterol dehydrogenase, wherein cholesterol esterase, a nonionic surfactant, albumin and an oxidized coenzyme are comprised in either or both of the first reagent and/or the second reagent.

17. The kit according to claim 15 or 16, which further comprises a reagent for quantitatively determining a reduced coenzyme in either or both the first reagent and/or the second reagent.

18. The kit according to any one of claims 13 to 17, which further comprises a bile acid derivative in either or both the first reagent and/or the second reagent.

19. The kit according to claim 18, wherein the bile acid derivative is an anionic bile acid derivative.

20. The kit according to any one of claims 13 to 19, wherein the nonionic surfactant is polyoxyethylene alkylamine or polyoxyethylene alkenylamine.

21. The kit according to any of claims 13 to 20, wherein the polyanion is dextran sulfate or a salt thereof.

22. A method for quantitatively determining cholesterol in high-density lipoprotein in a sample, which comprises: reacting a sample with i) cholesterol esterase and cholesterol oxidase or ii) cholesterol esterase, an oxidized coenzyme and cholesterol dehydrogenase in an aqueous medium comprising i) nonionic surfactant, polyanion and albumin or ii) a surfactant selected from the group consisting of polyoxyethylene alkylamine or polyoxyethylene alkenylamine and a surfactant selected from the group consisting of polyoxyethylene polycyclic phenyl ether sulfate and an anionic bile acid derivative, and measuring the formed hydrogen peroxide or a reduced coenzyme.

23. A method for quantitatively determining cholesterol in high-density lipoprotein in a sample, which comprises: reacting a sample with i) cholesterol esterase and cholesterol oxidase or ii) cholesterol esterase, an oxidized coenzyme and cholesterol dehydrogenase in an aqueous medium comprising a surfactant selected from the group consisting of polyoxyethylene alkylamine and polyoxyethylene alkenylamine and a surfactant selected from the group consisting of polyoxyethylene polycyclic phenyl ether sulfate and an anionic bile acid derivative, and

measuring the formed hydrogen peroxide or a reduced coenzyme.

24. The method according to claim 23, wherein the aqueous medium further comprises polyanion.

25. The method according to claims 23 or 24, wherein the polyanion is dextran sulfate or a salt thereof.

26. The method according to any one of claims 23 to 25, wherein the aqueous medium further comprises albumin.

27. A reagent for quantitatively determining cholesterol in high-density lipoprotein, which comprises polyoxyethylene alkylamine or polyoxyethylene alkenylamine, polyoxyethylene polycyclic phenyl ether sulfate or an anionic bile acid derivative, cholesterol esterase, cholesterol oxidase and a reagent for quantitatively determining hydrogen peroxide.

28. A reagent for quantitatively determining cholesterol in high-density lipoprotein, which comprises polyoxyethylene alkylamine or polyoxyethylene alkenylamine, polyoxyethylene polycyclic phenyl ether sulfate or an anionic bile acid derivative, cholesterol esterase, cholesterol dehydrogenase and an oxidized coenzyme.

29. The reagent according to claim 28, which further comprises a reagent for quantitatively determining a reduced coenzyme.

30. The reagent according to any of claims 27 to 29, which further comprises polyanion.

31. The reagent according to claim 30, wherein the

polyanion is dextran sulfate or a salt thereof.

32. The reagent according to any one of claims 27 to 31, which further comprises albumin.

33. A kit for quantitatively determining cholesterol in high-density lipoprotein, which comprises a first reagent and a second reagent, wherein cholesterol esterase, polyoxyethylene alkylamine or polyoxyethylene alkenylamine, polyoxyethylene polycyclic phenyl ether sulfate or an anionic bile acid derivative and a reagent for quantitatively determining hydrogen peroxide are comprised in either or both of the first reagent and/or the second reagent, and cholesterol oxidase is comprised in the second reagent.

34. A kit for quantitatively determining cholesterol in high-density lipoprotein, which comprises a first reagent and a second reagent, wherein cholesterol esterase, polyoxyethylene alkylamine or polyoxyethylene alkenylamine, polyoxyethylene polycyclic phenyl ether sulfate or an anionic bile acid derivative and an oxidized coenzyme are comprised in either or both of the first reagent and/or the second reagent, and cholesterol dehydrogenase is comprised in the second reagent.

35. The kit according to claim 34, which further comprises a reagent for quantitatively determining a reduced coenzyme in either or both of the first reagent and/or the second reagent.

36. The kit according to any of claims 33 to 35, further comprising polyanion in any of or both of the first reagent and

the second reagent.

37. The kit according to any one of claims 33 to 36, which further comprises albumin in either or both of the first reagent and/or the second reagent.